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# Water in star-forming regions with *Herschel* (WISH)⋆

## V. The physical conditions in low-mass protostellar outflows revealed by multi-transition water observations

## *(Corrigendum)*

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The original calculation of the fraction of the total integrated intensity in each component type presented in Table 4 of Mottram et al. (2014) did not correctly take into account the different distance corrections for the cavity shock compared to the spot shock and envelope components. For the cavity shock components a correction of $(d/200\,\mathrm{pc})$ was used, assuming that the emission is extended along the outflow axis but point-like perpendicular to it, while for the other components $(d/200\,\mathrm{pc})^2$ was used, assuming that both are point-like. The table given below provides the corrected values.

This primarily affects the contribution of the envelope, which is decreased in the corrected version, leading to a slight increase in the relative contribution of the cavity shock component. The correction does not change the discussion of the results or the conclusions drawn from them.

## References

Mottram, J. C., Kristensen, L. E., van Dishoeck, E. F., et al. 2014, A&A, 572, A21

⋆ *Herschel* is an ESA space observatory with science instruments provided by European-led Principal Investigator consortia and with important participation from NASA.

**Table 4.** Detection statistics and average fraction of the total integrated intensity that each component contributes for each transition.

| Line | Class 0 | | | | | | Class I | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Envelope[a] | | Cavity shock | | Spot shock | | Envelope[a] | | Cavity shock | | Spot shock | |
| | $D^b$ | $I_{comp}/I_{tot}$ | $D^b$ | $I_{comp}/I_{tot}$ | $D^b$ | $I_{comp}/I_{tot}$ | $D^b$ | $I_{comp}/I_{tot}$ | $D^b$ | $I_{comp}/I_{tot}$ | $D^b$ | $I_{comp}/I_{tot}$ |
| $H_2O$ $1_{11}$–$0_{00}$ | 14 | −0.1 ± 0.1 | 14 | 0.9 ± 0.1 | 9 | 0.2 ± 0.1 | 4 | 0.0 ± 0.1 | 4 | 1.0 ± 0.1 | 0 | – |
| $H_2O$ $1_{10}$–$1_{01}$ | 15 | −0.1 ± 0.1 | 15 | 0.9 ± 0.1 | 8 | 0.2 ± 0.1 | 12 | 0.1 ± 0.1 | 11 | 1.1 ± 0.3 | 3 | −0.2 ± 0.2 |
| $H_2O$ $2_{12}$–$1_{01}$ | 5 | −0.2 ± 0.1 | 5 | 1.0 ± 0.1 | 5 | 0.2 ± 0.2 | – | – | – | – | – | – |
| $H_2O$ $2_{02}$–$1_{11}$ | 14 | 0.0 ± 0.1 | 14 | 0.7 ± 0.1 | 10 | 0.3 ± 0.1 | 8 | 0.2 ± 0.1 | 7 | 0.8 ± 0.1 | 1 | 0.0 ± 0.0 |
| $H_2O$ $2_{11}$–$2_{02}$ | 11 | 0.0 ± 0.1 | 11 | 0.7 ± 0.1 | 8 | 0.3 ± 0.1 | 7 | 0.3 ± 0.2 | 5 | 0.7 ± 0.2 | 0 | – |
| $H_2O$ $3_{12}$–$2_{21}$ | 7 | 0.0 ± 0.1 | 7 | 0.8 ± 0.1 | 5 | 0.2 ± 0.1 | 3 | 0.0 ± 0.1 | 3 | 1.0 ± 0.1 | 0 | – |
| $H_2O$ $3_{12}$–$3_{03}$ | 8 | 0.0 ± 0.1 | 8 | 0.8 ± 0.1 | 7 | 0.2 ± 0.1 | 2 | 0.0 ± 0.1 | 2 | 1.0 ± 0.1 | 0 | – |

**Notes.** [(a)] Calculated for all sources with detected emission as $I_{tot} - I_{cavity\,shock} - I_{spot\,shock}$. May include emission and absorption. [(b)] No. of sources with detections in this component.